

10/529166
Rec'd PCT/PTO 24 MAR 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/029621 A3

(51) International Patent Classification⁷: G01N 33/50,
A01K 67/027 (AT). LIEHL, Ekke [DE/AT]; Badgasse 12/2, A-2371
Hinterbrühl (AT). MAYER, Peter [AT/AT]; Trauttmannsdorffgasse 32/4, A-1130 Vienna (AT).

(21) International Application Number:
PCT/EP2003/010700 (74) Agent: GRUBB, Philip; Novartis AG, Corporate Intellectual
Property, CH-4002 Basel (CH).

(22) International Filing Date:
25 September 2003 (25.09.2003) (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ,
TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW.

(25) Filing Language: English (26) Publication Language: English
(30) Priority Data: (81) Designated States (national): AE, AG, AL, AM, AT, AU,
60/413,706 26 September 2002 (26.09.2002) US AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
60/413,702 26 September 2002 (26.09.2002) US CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
60/413,703 26 September 2002 (26.09.2002) US GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ,
TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW.

(71) Applicant (for all designated States except AT, US): NOVARTIS AG [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(71) Applicant (for AT only): NOVARTIS PHARMA GMBH [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT). (88) Date of publication of the international search report:
14 October 2004

(72) Inventors; and
(75) Inventors/Applicants (for US only): BURKHART, Christoph [AT/AT]; Stuweckengasse 9, A-1130 Vienna

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/029621 A3

(54) Title: TCELL MEDIATOR/MODULATOR ASSAY BASED UPON TCELL RESTRICTED TRANSGENIC MOUSE

(57) Abstract: An in vivo screening assay for identifying an agent that interferes with T cell activation and/or differentiation and/or modulation of other inflammatory effector cells.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/10700

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N33/50 A01K67/027

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N A01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, WPI Data, PAJ, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>KNOTT PATRICK G ET AL: "Airway inflammation driven by antigen-specific resident lung CD4+ T cells in alpha₁-T cell receptor transgenic mice" AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE, vol. 161, no. 4 part 1, April 2000 (2000-04), pages 1340-1348, XP002269615 ISSN: 1073-449X the whole document</p> <p>—</p> <p style="text-align: center;">-/-</p>	1-4, 6, 7

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the International search

11 February 2004

Date of mailing of the International search report

19/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hinchliffe, P

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/10700

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DIXON KATHLEEN FITZGERALD ET AL: "Use of D011.10 TcR Tg mice for analysis of an Lck inhibitor" FASEB JOURNAL, vol. 16, no. 4, 20 March 2002 (2002-03-20), page A316 XP009025641 Annual Meeting of the Professional Research Scientists on Experimental Biology; New Orleans, Louisiana, USA; April 20-24, 2002 ISSN: 0892-6638 the whole document</p> <p>—</p>	1-4,6,7
X	<p>MORE S H ET AL: "'Ignorance' of antigen-specific murine CD4+ and CD8+ T cells is overruled by lipopolysaccharide and leads to specific induction of IFN-gamma" SCANDINAVIAN JOURNAL OF IMMUNOLOGY, vol. 55, no. 4, April 2002 (2002-04), pages 329-335, XP001179345 ISSN: 0300-9475 the whole document</p> <p>—</p>	1-4,6,7
X	<p>MURPHY K M ET AL: "INDUCTION BY ANTIGEN OF INTRATHYMIC APOPTOSIS OF CD4 POSITIVE CD8 POSITIVE TCR-L-0 THYMOCYTES IN-VIVO" SCIENCE (WASHINGTON D C), vol. 250, no. 4988, 1990, pages 1720-1723, XP001179156 ISSN: 0036-8075 cited in the application the whole document</p> <p>—</p>	1
X	<p>HOGQUIST K A ET AL: "T CELL RECEPTOR ANTAGONIST PEPTIDES INDUCE POSITIVE SELECTION" CELL, CELL PRESS, CAMBRIDGE, MA, US, vol. 76, no. 1, 14 January 1994 (1994-01-14), pages 17-27, XP000999394 ISSN: 0092-8674 cited in the application the whole document</p> <p>—</p>	1
X	<p>JANSSEN EDITH M ET AL: "Immunomodulatory effects of antigen-pulsed macrophages in a murine model of allergic asthma" AMERICAN JOURNAL OF RESPIRATORY CELL AND MOLECULAR BIOLOGY, vol. 27, no. 2, August 2002 (2002-08), pages 257-264, XP002269618 ISSN: 1044-1549 the whole document</p> <p>—</p>	1-4,6,7